



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of:

Applicant : Sherif Yacoub  
Application No. : 10/706,408  
Filed : November 12, 2003  
For : A SYSTEM AND METHOD FOR PROVIDING ASSISTANCE  
IN SPEECH RECOGNITION APPLICATIONS  
Examiner : JONES, Danelle E.  
Art Unit : 2626  
Docket No. : 200300593-1  
Date : August 25, 2008

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APPEAL BRIEF

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Sir:

This appeal is from the decision of the Examiner, in an Office Action mailed February 27, 2008, finally rejecting claims 1-30.

REAL PARTY IN INTEREST

The real party in interest is Hewlett-Packard Development Company, LP, a limited partnership established under the laws of the State of Texas and having a principal place of business at 20555 S.H. 249 Houston, TX 77070, U.S.A. (hereinafter "HPDC"). HPDC is a Texas limited partnership and is a wholly-owned affiliate of Hewlett-Packard Company, a Delaware Corporation, headquartered in Palo Alto, CA. The general or managing partner of HPDC is HPQ Holdings, LLC.

### RELATED APPEALS AND INTERFERENCES

Applicant's representative has not identified, and does not know of, any other appeals of interferences which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

### STATUS OF CLAIMS

Claims 1-30 are pending in the application. Claims 1-30 were rejected in the Office Action dated February 27, 2008. Applicants' appeal the final rejection of claims 1-30 which are copied in the attached CLAIMS APPENDIX.

### STATUS OF AMENDMENTS

No Amendment After Final is enclosed with this brief. The last Amendment was filed October 4, 2007.

### SUMMARY OF CLAIMED SUBJECT MATTER

#### Independent Claim 1

Claim 1 is directed to a processor-based method for producing a message during a speech recognition application. The method comprises retrieving an identified path from a set of paths (Current Application page 10, lines 5-23); retrieving an identified option from a set of options associated with the identified path (Current Application page 11, lines 27-32); concatenating the identified path and the identified option to form a selection path (Current Application page 11, line 32 to page 12, line 1); and producing a message associated with the selection path (Current Application page 12, lines 1-5).

#### Dependent Claims 2-5

Claim 2 is directed to the processor-based method of claim 1 wherein said identified path is retrieved without executing a general assistance command for describing to a user all available paths (Current Application page 21, lines 8-21). Claim 3 is directed to the processor-based method of Claim 1 wherein said identified path is retrieved without having described to a user any paths from the set of paths other than the identified path (Current Application page 21, lines 8-21). Claim 4 is directed to the processor-based method of Claim

1 additionally comprising continually monitoring the identified path to insure that the identified option is associated with the identified path (Current Application page 22, line 4 to page 23, line 5). Claim 5 is directed to a message produced in accordance with the method of Claim 1 (Current Application page 10, lines 25-28).

#### Independent Claims 6-7

Claim 6 is directed to a computer-readable medium comprising instructions for: retrieving an identified path from a set of paths (Current Application page 10, lines 5-23); retrieving an identified option from a set of options associated with the identified path (Current Application page 11, lines 27-32); concatenating the identified path and the identified option to form a selection path (Current Application page 11, line 32 to page 12, line 1 ); and producing a message associated with the selection path (Current Application page 12, lines 1-5).

Claim 7 is directed to a speech recognition system (Current Application page 7, line 27 to page 8, line 15). The system comprises an application (Current Application page 8, line 13; page 8, line 17 to page 9, line 2); an assistance manager for forming a selection path and for finding a message associated with the selection path (Current Application page 8, line 14; page 9, line 28 to page 10, line 3); a vocabulary accessible by the application and the assistance manager and including a set of utterances applicable to the application (Current Application page 8, line 14; page 9, lines 4-14); and a speech recognition engine to recognize the utterances (Current Application page 8, line 14-15; page 9, lines 16-26).

#### Dependent Claims 8-13

Claim 8 is directed to the speech recognition system of claim 7 additionally comprising a converter (Current Application page 12, line 7-22). Claim 9 is directed to the speech recognition system of claim 7 wherein said vocabulary additionally includes at least one hot key word (Current Application page 20, line 6 to page 21, line 6). Claim 10 is directed to the speech recognition system of claim 7 additionally comprising a dialog manager (Current Application page 12, line 24-31). Claim 11 is directed to the speech recognition system of claim 8 additionally comprising a dialog manager (Current Application page 12, line 24-31). Claim 12 is directed to an operating system incorporating the speech recognition system of claim 7 (Current Application page 13, line 11-29). Claim 13 is

directed to a computing device incorporating the speech recognition system of claim 7 (Current Application page 12, line 33 to page 13, line 9).

#### Independent Claim 14

Claim 14 is directed to a system for finding a message during a speech recognition application comprising: an application (Current Application page 8, line 13; page 8, line 17 to page 9, line 2); a vocabulary accessible by the application and including a set of utterances applicable to the application (Current Application page 8, line 14; page 9, lines 4-14); a speech recognition engine to recognize the utterances (Current Application page 8, line 14-15; page 9, lines 16-26); and an assistance manager for forming a selection path and for finding a message associated with the selection path during a speech recognition application (Current Application page 8, line 14; page 9, line 28 to page 10, line 3).

#### Dependent Claims 15-17

Claim 15 is directed to the system of claim 14 additionally comprising a converter (Current Application page 12, line 7-22). Claim 16 is directed to the system of claim 14 additionally comprising a dialog manager (Current Application page 12, line 24-31). Claim 17 is directed to the system of claim 15 additionally comprising a dialog manager (Current Application page 12, line 24-31).

#### Independent Claim 18

Claim 18 is directed to a processor-based method for providing assistance in a speech recognition application, comprising: creating a speech dialog for enabling a conversation to be conducted in a speech recognition application between a user and a speech recognition system (Current Application page 9, lines 13-14); providing support for an interrupt event during a conversation between a user and a speech recognition system (Current Application page 9, line 31 to page 10, line 3); creating a selection path corresponding the support for the interrupt event initiated by the user without describing to the user all available paths (Current Application page 10, lines 5-23); creating a message for the selection path (Current Application page 11, line 6-15); and interrupting a conversation between a user and a speech recognition system for providing assistance to the user (Current Application page 12, lines 7-22).

Dependent Claims 19-30

Claim 19 is directed to the processor-based method of claim 18 wherein said interrupt event comprises a hot key word (Current Application page 15, lines 1-15). Claim 20 is directed to the processor-based method of claim 18 wherein said interrupting the conversation comprises interrupting the conversation with the interrupt event (Current Application page 16, lines 18-19). Claim 21 is directed to the processor-based method of claim 19 wherein said interrupting the conversation comprises uttering the hot key word by the user (Current Application page 16, lines 20-22). Claim 22 is directed to the processor-based method of claim 18 wherein said interrupting a conversation comprises activating an assistance manager (Current Application page 9, line 32 to page 10, lines 3). Claim 23 is directed to the processor-based method of claim 18 additionally comprising: retrieving an identified path from a set of paths (Current Application page 11, lines 27-32); retrieving an identified option from a set of options associated with the identified path (Current Application page 11, line 32); concatenating the identified path and the identified option to form the selection path (Current Application page 11, line 32-34); and producing the message associated with the selection path for providing assistance to the user (Current Application page 11, line 34 to page 12, line 5). Claim 24 is directed to the processor-based method of claim 23 wherein said identified path is retrieved without executing a general assistance command for describing to the user all available paths (Current Application page 21, lines 8-21). Claim 25 is directed to the processor-based method of claim 23 wherein said identified path is retrieved without having described to the user any paths from the set of paths, other than the identified path (Current Application page 21, lines 8-21). Claim 26 is directed to the processor-based method of claim 18 wherein said interrupting a conversation comprises activating an assistance manager for finding the selection path and for producing the message for the selection path (Current Application page 9, line 25 to page 10, line 4). Claim 27 is directed to the processor-based method of claim 19 wherein said interrupting the conversation comprises uttering by the user the hot key word along with a user-selective topic (Current Application page 21, line 26 to page 22, line 2). Claim 28 is directed to the processor-based method of claim 27 wherein said user-selective topic is selected from a group of topics consisting of an active path and an option (Current Application page 21, line 26-31). Claim 29 is directed to the processor-based method of claim 28 wherein said selection path comprises said user-selective topic (Current Application page 21, line 31 to page 22, line 2). Claim 30 is directed to the processor-based method of claim 28 wherein

said selection path comprises said active path (Current Application page 10, lines 5-10).

### GROUND OF REJECTION TO BE REVIEWED ON APPEAL

1. Claims 1-2, 4-24, 26-30 are rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent 6,298,324 ("Zuberec").
2. Claims 3 and 25 are rejected under 35 U.S.C. §103(a) as being unpatentable over Zuberec in view of U.S. Patent 5,867,817 ("Catallo").

### ARGUMENT

Claims 1-30 are pending in the current application. In an Office Action dated August 2, 2007, the Examiner rejected claims 1,2, 4-24, 26-30 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent 6,298,324 ("Zuberec"); and rejected claims 3 and 25 under 35 U.S.C. §103(a) as being unpatentable over Zuberec in view of U.S. Patent 5,867,817 ("Catallo"). Applicant's representative respectfully traverses these rejections.

The Examiner has twice rejected claims 1-30 of the current application based on the above cited references despite Applicants' detailed arguments with regard to the dissimilarity of the teachings of these references from the currently claimed invention. Therefore, Applicant believes that an appeal at this time is the most expeditious vehicle for advancing prosecution. The primary object of this appeal brief is to demonstrate that Zuberec does not anticipate claims 1, 2, 4-24, and 26-30; and that claims 3 and 25 are patentable over Zuberec in view of Catallo.

### **ISSUE 1**

1. Whether claims 1, 2, 4-24, and 26-30 under 35 U.S.C. §102(b) are anticipated by U.S. Patent 6,298,324 ("Zuberec").

Applicant's representative asserts that claims 1, 2, 4-24, and 26-30 are not anticipated under 35 U.S.C. §102 by Zuberec because the Examiner has not shown that Zuberec anticipates claims 1, 2, 4-24, and 26-30 under 35 U.S.C. §102 as interpreted by the long standing case law. M.P.E.P. §2131 quotes holdings from cases directed to interpreting and applying 35 U.S.C. §102 as follows:

- (1) a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently, in a single prior art reference *Verdgaal Bros. v. Union Oil Co. of California*, 814 F.2d 628 (Fed. Cir. 1987),
- (2) the identical invention must be shown in as complete detail as is contained in the claim *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226 (Fed. Cir. 1989), and
- (3) the elements must be arranged as is required by the claim, *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

The Examiner ignores certain elements of claims 1, 2, 4-24, and 26-30 that are not found in Zuberec. However, according to *Verdgaal Bros*, *Richardson*, and *In re Bond*, the Examiner must demonstrate that Zuberec teaches methods and systems that include each and every element of claims 1, 2, 4-24, and 26-30, that the elements are described in as complete detail as contained in claims 1, 2, 4-24, and 26-30, and the elements must be arranged in the same manner as the elements in claims 1, 2, 4-24, and 26-30.

The difference between the method and system embodiments of the current invention and the speech recognition system of Zuberec is described as follows. Zuberec is directed to a speech recognition system having a user interface that helps a user navigate new or changing grammars. Zuberec defines a vocabulary in col. 1, lines 47-49 as a complete list of recognized words or phrases, and in col. 1, lines 49-51, Zuberec defines an "active grammar" as a subset of the vocabulary that the recognition system is attempting to detect at any one time. The speech recognition system of Zuberec includes an application, a vocabulary that holds a set of utterances applicable to the application, and an active grammar that holds a subset of the utterances in the vocabulary. The grammar includes a help command as well as other options (Col. 3, lines 49-51). Figure 3 of Zuberec shows a discrete speech recognition system 40. The vocabulary 44 is the complete list of utterances that are recognized by the application 42. The vocabulary 44 is stored in memory that can be accessed by the application. The active grammar 46 is a subset of the vocabulary that the recognition system is attempting to recognize at any one time. During operation, the application 42 extracts various subsets of utterances from the vocabulary 44 and registers them as the active grammar (Col. 4, lines 58-64). Upon receiving a keyword or utterance, the sole function of which is to change the active grammar, the system 40 temporarily *expands* its active grammar from the default grammar to a ballooned grammar that includes both the words in the default grammar and the additional words triggered by detection of the keyword. The application 42 extracts additional words from the vocabulary 44 and adds them to the active grammar 46. In this manner, the user has the option to select a word from the original

grammar, or choose a word from the additional list (Col. 5, lines 28-47). Zuberec summarizes how the speech recognition system 40 the active grammar responds to a request as follows:

As a result of the activation of different features or functions of the system, the user is faced with a new or different grammar. In this case, the user may not know what words and/or phrases are available to speak. The speech recognition system has an operator interface help function that offers help to the user by saying *all* of the available words or phrases. The user might say "Help," "What can I say," or some other word/phrase to invoke the help function. Upon detecting the help request, the speech recognition system obtains the list of utterances for the active grammar and with the assistance of the text-to-speech converter 49, begins verbally enunciating them for the user to hear (Col. 5, lines 48-59).

Therefore, Zuberec describes a system and method to provide help information by listing *all* available options in response to a help command from a user. Any time the user does not know or has forgotten available options from which to select, the user may speak a help command, such as: "What can I say?" Subsequently, *all* available options are repeated to the user, including those options that the user already knows. Thus, the help information system and method described in Zuberec produces slow processing, and the needs of the user are not optimized.

In contrast, embodiments of the current invention include a help function which interfaces with a user to offer expeditious assistance to the user by *bypassing the enunciation of all options* available to the user, including those options which the user already knows. The user of the present invention is allowed to ask about a particular option. Thus, help on all of the available options of a particular conversation position does not have to be listed or enunciated. For example, if a user says "Help" or "What can I say?" or any other key words which invokes a help or assistance function, also called a "hot" key word, embodiments of the present invention detects the spoken utterance or "hot" key word, obtains a list of certain utterances from a vocabulary. With the assistance of a converter, *instead of verbally enunciating all* of the obtained utterances for the user to hear, embodiments of the present invention bypass the enunciation and go directly to the particular option or selection that the user does not understand, and provides help messages accordingly. Thus, embodiments of the present invention provide help messages that are directed to the particular option or selection that a user does not understand without the user having to hear and waste time laboriously listening to an entire list of options.

With regard to claims 1, 6, and 23, the Examiner contends that the claim



element "retrieving an identified path from a set of paths" of claims 1, 6, and 23 is anticipated by col. 9, lines 32-35 of Zuberec which states:

In this case, the default grammar is active and the speech recognition system says the words "Place," "Name," "Directions," "Address," and "What Can I Say" in response to the user's question "What can I say." The system may also be configured to concurrently display the available words on the display 68 (or 160).

However, Applicant's representative cannot find reference to language that is even remotely analogous to an "identified path" or "a set of paths" in col. 9, lines 32-35. In fact, col. 9, lines 32-35 are referring to a complete list of options that are available to the user. There is no reference to *retrieving* a selection path or the equivalent of a selection path. In particular, col. 9, lines 32-35 is describing a portion of the operation performed in step 202 of Figure 7, which is directed to *detecting* an utterance and subsequently listing all the available options in the active grammar which is not the same as *retrieving* an identified path. The Examiner also contends that the claim element "retrieving an identified option from a set of options associated with the identified path" is anticipated in col. 9, lines 57-64. Applicant's representative cannot find reference to *retrieving* an identified option in or an equivalent step in col. 9, lines 57-64, which states:

With reference again to step 204, if the utterance is not the grammar help phrase (i.e., the "no" branch from step 204), the speech recognition engine 48 determines whether the utterance is a keyword (step 208). If the user had spoken a keyword such as "Place" (i.e., the "yes" branch from step 208), the speech recognition system temporarily expands the default grammar to include an additional set of utterances triggered by the keyword (step 210 in FIG. 5).

Rather, col. 9, lines 57-64 are directed to describing the operation carried out by a decision box (step 204) of the control-flow diagram shown in Figure 7 of Zuberec. In other words, the utterance is already in hand and the description provided in col. 9, lines 57-64 relates to a decision to be made in step 204 based on that utterance. Finally, the Examiner contends that the claim element "concatenating the identified path and the identified option to form a selection path" is found in col. 9, lines 64-67, which states:

In this case, the extra utterances are location-related terms, "City," "County," and "Street," as shown in grammar 252 of FIG. 8. Table 5 lists the ballooned grammar.

Applicant's representative cannot find reference to *concatenating* the identified path and the identified option or an equivalent operation in col. 9, lines 64-67. Col. 9, lines 64-67 are directed to listing possible options and have nothing to do with the process of concatenation

as described in claims 1, 6, and 23. The Examiner offers no evidence to support the assertion that col. 9, lines 64-67 is the same concatenation as described in the current application.

In contrast, the steps of “retrieving an identified path from a set of paths,” retrieving an identified option from a set of options,” and “concatenating the identified path and the identified option to form a selection path” of claims 1, 6, and 23 are described in the detailed description. First, a description of examples of selection paths and options are provided beginning with page 18, line 2 and ending on page 19, line 3 as follows:

Generating selection paths in accordance with block 34 [of Figure 34] may be with any suitable means and/or by any suitable method, such as by analyzing the speech dialog that was created from a dialog description (e.g., VoiceXML), and generating what may be termed as “selection paths,” or “sPaths” for brevity purpose. A sPath holds information about how the user reaches a specific selection option (e.g., a specific point in a conversation) starting from a dialog root node. For each possible selection path (e.g., a decision option) that the user can make at any time in the conversation, a sPath will be created. By way of example only, the following are representative of some sPaths generated for the Voice XML speech dialog design immediately set forth above as an example for creating a speech dialog design for contract searches:

```
/contract  
/exhibit  
/contract/ID  
/contract/Amendment  
/contract/Type  
/contract/Business  
/contract/date.  
/exhibit/ID  
/exhibit/Entity  
/exhibit/Language  
/exhibit/Business  
/exhibit/Number  
/exhibit/Description
```

Thus, by way of example only, the commencement of a sPath may be “contract” or “exhibit”, both which may be designated as “an active path.” Any active path may be the beginning of a sPath. If “contract” has been identified as an active path, possible options for completing a sPath from “contract” include: ID, Amendment, Type, Business or date. Similarly, if “exhibit” has been identified as an active path, possible options for completing a sPath from “exhibit” include: ID, Entity, Language, Business, Number, or Description. Thus, a suitable dialog analysis method takes into consideration all user selection possibilities, and resolves loops as a result of “go to” statements construct.

Next, the steps described in claims 1, 6, and 23 are described on page 21, lines 8-24 as

follows:

Activating the assistance manager **40** for quick assistance or help in accordance with block **47** may be with any suitable means and/or by any suitable method, such as by the user saying or uttering a “hot” key word or phrase (e.g., “what is .....”). After a “hot” key word or phrase has been mentioned or stated by the user, the assistance manager **17** is activated to form a selection path and find any message (e.g., a help message) associated with the selection path. More specifically and for various embodiments of the present invention, activation of the assistance manager **17** causes the assistance manager **17** to identify and to *retrieve a path from a set of paths, preferably without describing or enumerating to the user all paths available within the set of paths, and to subsequently retrieve an option from a set of options associated with the retrieved path.* The assistance manager **17** then concatenates the *retrieved path and retrieved option to form a selection path (i.e., sPath).* (Page 21, lines 8-24)

In the Response to Arguments section of the Office Action dated February 22, 2008, the Examiner asserts that Zuberec “discloses detecting an utterance, where the utterance is the path, and detecting it is the act of retrieving it.” As clearly explained in the detailed description, retrieving a selection path is not the same as detecting an utterance. Zuberec explains detecting an utterance is detecting a single keyword spoken or entered by a user. In contrast, retrieving a selection path is performed in response to detecting an utterance. A selection path is composed of any number of words strung together and is not just a single word uttered by a user. In addition, the Examiner asserts that “concatenating the path is demonstrated by the ballooned grammar.” This statement indicates that the Examiner does not understand the difference between concatenating, as described in the current application, and ballooned grammar, as described in Zuberec. Concatenating is stringing together a series of utterances and/or options into a selection path, an example of which is described in the detailed description of the current application on page 21, lines 8-24. Examples of concatenated short selection paths are given on page 18, lines 19-29. In contrast, Zuberec describes “ballooning” grammar in col. 5, lines 38-43 as follows:

the system temporarily expand[s] its active grammar from the default grammar to a ballooned grammar that includes both the words in the default grammar and the additional words triggered by detection of the keyword.

In other words, based on a keyword utter by a user, ballooning is the result of selecting additional words from the vocabulary and adding these words to the set of words already in the grammar. The words in the grammar are *not* concatenated or strung together.

With regard to claims 7 and 14, the Examiner contends that previously

presented claims 7 and 14 are anticipated by the speech recognition system 40, shown in Figure 3 of Zuberec, and that elements of previously presented claims 7 and 14 correspond to elements of the speech recognition system 40. The Examiner also contends that the element “an assistance manager for forming a selection path [claim 7] and for finding a message associated with the selection path [claim 14]” are elements of the speech recognition system 40 shown in Figure 3. An assistance manager is described in the current application:

The assistance manager 17 [Figure 1] may be any suitable engine, module, or the like, that is capable of providing assistance to the user in accordance with various embodiments of the present invention. During a dialog between a user and the voice recognition system 10, the user may at any time speak a certain word(s) to activate the assistance manager 17 to trigger an event (e.g., a help event) associated with the spoken certain word(s). These certain words may be termed “hot” key words which are part of the vocabulary 14 and may function as an interrupt event (Page 9, line 28 to page 10, line 3).

For various embodiments of the invention, activation of the assistance manager 17 causes the assistance manager 17 to form a selection path and find any message (e.g., a help message) associated with the selection path. More specifically and in an embodiment of the present invention, activation of the assistance manager 17 causes the assistance manager 17 to retrieve a path from a set of paths, preferably without describing or enumerating to the user all paths available within the set of paths. Activation of the assistance manager 17 may also cause the assistance manager 17 to retrieve an option from a set of options associated with the retrieved path. The assistance manager 17 then concatenates the retrieved path and retrieved option to form a selection path (i.e., sPath) (Page 10, line 25 to page 11, line 4).

However, the detailed description of Zuberec does not include an assistance manager or an equivalent device, and the Examiner does not reference any specific passage or portion of the detailed description of Zuberec that describes an assistance manager or a device that performs an equivalent operation. Thus, the Examiner has not demonstrated that Zuberec teaches an assistance manager or a device that performs the same operations as the assistance manager described in claims 7 and 14.

In the Response to Arguments section of the Office Action dated February 22, 2008, the Examiner asserts

[w]ith respect to the rejection(s) of claim(s) 7 and 14, Zuberec et al, Figure 7, illustrates a process of determining a correct path by a decision tree. Also, the message is found during this decision when the detection of the utterance takes place.

The Examiner appears to be combining a system with a method in an effort to reject claims 7 and 14. Figure 7 of Zuberec describes to a method, but claims 7 and 14 are system claims,

not method claims. In rejecting claims 7 and 14, the Examiner asserts the speech recognition system 40 shown in Figure 3 anticipates all the claim elements of claims 7 and 14 except for the claim element directed to the “assistance manager.” However, because Zuberec does not actually disclose an assistance manager in the speech recognition system 40, the Examiner believes that the Examiner can search elsewhere in Zuberec to find the missing element. However, this interpretation of 35 U.S.C. §102 is wrong. According to *Verdgaal Bros*, *Richardson*, and *In re Bond*, the Examiner has to demonstrate that Zuberec actually teaches a system that includes each and every element of claims 7 and 14, that is described in as complete detail as contained in claims 7 and 14, and not only includes the same elements, but these elements must be arranged in the same manner as the elements in claims 7 and 14. The Examiner cannot pick and choose elements from systems and methods of Zuberec and combine them to assert that claims 7 and 14 are anticipated under 35 U.S.C. §102.

With regard to claim 18, the Examiner contends that col. 9, lines 60-67 anticipate the original claim element “creating a selection path” of claim 18. However, col. 9, lines 60-67 teaches creating *all* available options that can be expanded from a keyword utterance by the user. In contrast, currently amended claim 18 selectively creates a selection path without describing to the user all available paths.

In the Response to Arguments section of the Office Action, the Examiner states that “Zuberec col. 10, lines 56-63 discloses there are changing grammars, thus the system does not describe all available paths, only the path pertaining to the particular grammar.” This is another instance where the Examiner demonstrates a misunderstanding of the difference between a path, as described in current application, and a grammar, as described in Zuberec. A path is composed of any number of words strung together, while a grammar is a subset of the vocabulary (col. 1, lines 48-50). The grammar does not include a path.

Therefore independent claims 1, 6, 7, 14, and 18 are not anticipated by Zuberec. Claims depending from claims 1, 6, 7, 14, and 18 are also not anticipated by Zuberec due to depending from allowable base claims and further in view of the additional limitations recited in the dependent claims.

## ISSUE 2

2. Whether claims 3 and 25 under 35 U.S.C. §103(a) are unpatentable over Zuberec in view of U.S. Patent 5,867,817 (“Catallo”).

The Examiner rejected claims 3 and 25 under 35 U.S.C. 103(a) as being unpatentable over Zuberec in view of Catallo. The Examiner's entire argument for claim 3 (claim 25) 25 is as follows:

Regarding claim 3, Zuberec et al discloses the processor-based method of claim 1 (claim 23). Zuberec does not disclose wherein said identified path is retrieved without having described to a user any paths from the set of path other than the identified path. However this feature is well known in the art as indicated by Catallo et al. Catallo et al discloses a speech recognition manager that loads a list of words depending upon the context state (see col. 2, lines 29-31). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make available certain words to increase speed and accuracy of the system.

It is applicant's contention that the Examiner has misapplied Catallo and failed to provide the necessary facts and analysis in support of the Examiner's rejections. According to the M.P.E.P. §2141 II, Examiners

fulfill the critical role of fact finders when resolving the *Graham* inquiries. When making an obviousness rejection, Office personnel must therefore ensure that the written record includes findings of fact concerning the state of the art and the teachings of the references applied. Factual findings made by Office personnel are the necessary underpinnings to establish obviousness.

In addition, according to the M.P.E.P. §2141 III

[t]he key to supporting any rejection under 35 U.S.C. §103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in *KSR* noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit. The Court quoting *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006), stated the "Rejections on obviousness cannot be sustained by mere conclusory statements; instead there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *KSR* 550 U.S. at \_\_\_, 82 USPQ2d at 1396.

Thus, according to M.P.E.P. §2141 II and III, the burden is on the Examiner to provide facts and an analysis of the facts in support of why claims 3 and 25 are unpatentable over Zuberec in view Catallo.

The Examiner contends that Zuberec teaches the processor-based methods of claims 1 and 23 and that Catallo teaches the limitations of claims 3 and 25 in col. 2, line 29-31. First, Zuberec does not teach or suggest all of the elements of the base claims 1 and 23 of claims 3 and 25, respectively, as described above. Second, Applicant's representative

contends that Catallo also does not teach or suggest the limitations of claims 3 and 25.

First, Applicant's representative suggest that col. 2, lines 29-31 be read in context with the whole of the first paragraph of the summary, of which it is a part, the abstract, and col. 6, lines 55-67 through col. 7, lines 1-24, which provide a more detailed description of the corresponding portion of the summary (col. 9, lines 29-31) cited by the Examiner. Catallo teaches the use of a speech recognition manager that receives representations of one or more words from a speech decoding system. The speech recognition manager interacts with a *context interpretation manager* which determines the *context* of the one or more words uttered by the user. The context interpretation manager of Catallo was developed to handle situations where people utter the same word or words in different circumstances because the words may have completely different meanings and illicite different responses from a listener. Catallo teaches using the speech recognition manager in combination with the context interpretation manager to handle normal human-to-human communication and thereby recognize spoken utterances so as to assign the correct contextual meaning to those utterances. As stated above, embodiments of the present invention are directed to help functions which interface with a user to offer expeditious assistance to the user by bypassing the enunciation of all available options available to the user and are not directed to determining the context of words uttered by a user.

Second, col. 2, lines 29-31 do not teach or suggest the limitations of claims 3 and 25 as asserted by the Examiner. Catallo does not teach or suggest the limitation of claims 3 and 25 stating that the "identified path" referred to in the base claims 1 and 23 "is retrieved without having to describe to the user any paths from the set of paths other than the identified path." In addition, Catallo does not teach or suggest identified paths or the equivalent of identified paths in accordance with the present invention.

The Examiner has not provided the evidence and analysis of the evidence upon which to support a rejection under 35 U.S.C. §103(a), and therefore, claims 3 and 35 are patentable over Zuberec in view of Catallo.

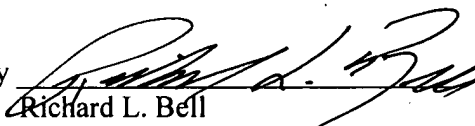
### CONCLUSION

Applicant would not choose to bear the financial and time costs of the process in order to attempt to patent an invention that is identical to another or is obvious. The Examiner wrongly interprets 35 U.S.C. §102 to mean that the Examiner can simply ignore elements of the claims that are not found in the reference. It is also not enough for an

obviousness rejection to conclude that because two references describe different devices that have a few elements in common with the claims of the current application, the references can simply be combined to make the claims obvious. As discussed above, the claims are quite distinct and dissimilar from the devices of Zuberec and Catallo and these differences are explicitly reflected in the language of the current claims. In addition, the Examiner has provided very little in the way of fact finding and analysis in support of the Examiner's rejections. As demonstrated above, the M.P.E.P. and current case law clearly place the burden of establishing anticipation and obviousness on the Examiner. The Examiner cannot assert that a claim is anticipated or obvious by simply referencing a few passages and Figures of prior art references without also citing facts and providing an explanation as to how the references actually support the Examiner's conclusion.

Applicant respectfully submits that all statutory requirements are met and that the present application is allowable over all the references of record. Therefore, Applicant respectfully requests that the present application be passed to issue.

Respectfully submitted,  
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CLAIMS APPENDIX

1. A processor-based method for producing a message during a speech recognition application comprising:

- retrieving an identified path from a set of paths;
- retrieving an identified option from a set of options associated with the identified path;
- concatenating the identified path and the identified option to form a selection path; and
- producing a message associated with the selection path.

2. The processor-based method of Claim 1 wherein said identified path is retrieved without executing a general assistance command for describing to a user all available paths.

3. The processor-based method of Claim 1 wherein said identified path is retrieved without having described to a user any paths from the set of paths other than the identified path.

4. The processor-based method of Claim 1 additionally comprising continually monitoring the identified path to insure that the identified option is associated with the identified path.

5. A message produced in accordance with the method of Claim 1.

6. A computer-readable medium comprising instructions for:

- retrieving an identified path from a set of paths;
- retrieving an identified option from a set of options associated with the identified path;
- concatenating the identified path and the identified option to form a selection path; and
- producing a message associated with the selection path.

7. A speech recognition system comprising:

an application;  
an assistance manager for forming a selection path and for finding a message associated with the selection path;  
a vocabulary accessible by the application and the assistance manager and including a set of utterances applicable to the application; and  
a speech recognition engine to recognize the utterances.

8. The speech recognition system of Claim 7 additionally comprising a converter.
9. The speech recognition system of Claim 7 wherein said vocabulary additionally includes at least one hot key word.
10. The speech recognition system of Claim 7 additionally comprising a dialog manager.
11. The speech recognition system of Claim 8 additionally comprising a dialog manager.
12. An operating system incorporating the speech recognition system of Claim 7.
13. A computing device incorporating the speech recognition system of Claim 7.
14. A system for finding a message during a speech recognition application comprising:  
an application;  
a vocabulary accessible by the application and including a set of utterances applicable to the application;  
a speech recognition engine to recognize the utterances; and  
an assistance manager for forming a selection path and for finding a message associated with the selection path during a speech recognition application.
15. The system of Claim 14 additionally comprising a converter.
16. The system of Claim 14 additionally comprising a dialog manager.
17. The system of Claim 15 additionally comprising a dialog manager.

18. A processor-based method for providing assistance in a speech recognition application, comprising:

- creating a speech dialog for enabling a conversation to be conducted in a speech recognition application between a user and a speech recognition system;

- providing support for an interrupt event during a conversation between a user and a speech recognition system;

- creating a selection path corresponding the support for the interrupt event initiated by the user without describing to the user all available paths;

- creating a message for the selection path; and

- interrupting a conversation between a user and a speech recognition system for providing assistance to the user.

19. The processor-based method of Claim 18 wherein said interrupt event comprises a hot key word.

20. The processor-based method of Claim 18 wherein said interrupting the conversation comprises interrupting the conversation with the interrupt event.

21. The processor-based method of Claim 19 wherein said interrupting the conversation comprises uttering the hot key word by the user.

22. The processor-based method of Claim 18 wherein said interrupting a conversation comprises activating an assistance manager.

23. The processor-based method of Claim 18 additionally comprising:

- retrieving an identified path from a set of paths;

- retrieving an identified option from a set of options associated with the identified path;

- concatenating the identified path and the identified option to form the selection path; and

- producing the message associated with the selection path for providing assistance to the user.

24. The processor-based method of Claim 23 wherein said identified path is retrieved without executing a general assistance command for describing to the user all available paths.

25. The processor-based method of Claim 23 wherein said identified path is retrieved without having described to the user any paths from the set of paths, other than the identified path.

26. The processor-based method of Claim 18 wherein said interrupting a conversation comprises activating an assistance manager for finding the selection path and for producing the message for the selection path.

27. The processor-based method of Claim 19 wherein said interrupting the conversation comprises uttering by the user the hot key word along with a user-selective topic.

28. The processor-based method of Claim 27 wherein said user-selective topic is selected from a group of topics consisting of an active path and an option.

29. The processor-based method of Claim 28 wherein said selection path comprises said user-selective topic.

30. The processor-based method of Claim 28 wherein said selection path comprises said active path.

EVIDENCE APPENDIX

None.

RELATED PROCEEDINGS APPENDIX

None.